# IRT Analysis (Not valid after 90 days of age)

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| **Test Code** | B0005 |
| **Test Summary** | This biochemical test analyzes the levels of immunoreactive trypsinogen (IRT) in newborns |
| **Turn-Around-Time (TAT)*** | 3 days |
| **Acceptable Sample Types** | Dried Blood Spots |
| **Acceptable Billing Types** | Self (patient) Payment<br>Institutional Billing |

## Indications for Testing

Infants with a clinical suspicion of cystic fibrosis

## Test Description

Immunoreactive trypsinogen (IRT) analysis is used to screen for cystic fibrosis. ?

## Condition Description

Cystic fibrosis is a condition characterized by the buildup of thick, sticky mucus that can damage many of the body's organs. Common signs and symptoms include progressive damage of the respiratory system and chronic digestive system problems. Cystic fibrosis is a common genetic condition that occurs in 1 in 2500-3500 caucasian newborns and is less common among other ethnic groups. Cystic fibrosis is a ressive condition caused by mutations in the gene CFTR. (NIH, genetics home reference)

## Test Methods and Limitations

Fluoroimmunometric assay based on the direct sandwich technique in which two antibodies are directed against a given analyte. Calibrators and serum samples, containing the analyte are reacted with immobilized monoclonal antibodies directed against the analyte. Europium-labeled monoclonal antibodies directed against an antigenic site on the analyte are reacted with the analyte bound to the solid-phase antibody. The Inducer dissociates europium ions from the labeled antibodies into the solution where they form highly fluorescent chelates with components of the Inducer. The fluorescence in each cup is then measured. The europium fluorescence from each sample is proportional to the concentration of analyte in the sample.

## Detailed Sample Requirements

### Dried Blood Spots